



# EXCELLENCE IN CONSTRUCTION PARTNERING

## Third Annual Awards



# State Highway Projects

## \$5 Million to \$10 Million

SH-24 and SH-25 Pavement Replacement, City of Rupert

SH-44 & SH-55, Eagle Road Intersection Reconstruction

SH-44, SH-16 to Linder Road





## EXCELLENCE IN CONSTRUCTION PARTNERING Third Annual Awards



### ITD/AGC Annual Excellence in Construction Partnering Awards - 2022 Nomination Form -

Contract Number/Route/Milepost: <small>8706/ SH-24 &amp; SH-25/ SH-24+ MP 3.450 to 3.735, 5.120 to 5.545, SH-25 50.830 to 550.938, 51.068 to 52.556</small>	Construction Engineer: Christopher Shaw
Project Name: SH-24 & SH-25, City of Rupert	Date Project Started: 07/25/2022
Contractor Name: Idaho Materials & Construction	Date Project Completed if applicable:
Email: Chris.Shaw@itd.idaho.gov	Phone #: 208-329-0895

1. Did the Contractor/ITD team participate in a Partnership Workshop or informal partnering?  
Y ☐ N ☐

2. Category of Award (select one):

**State Highway Projects (select size):**

- ☐ Projects less than \$1 million
- ☐ Projects \$1 million - \$5 million
- ☒ Projects \$5 million - \$10 million
- ☐ Projects greater than \$10 million

**Local Road Projects (select size):**

- ☐ Projects less than \$3 million
- ☐ Projects greater than \$3 million

3. Application:

Please provide an overview of the project explaining scope of work, cost, and schedule. Please also provide examples of how the project achieved each of the following six criteria:

- (1) Safety First
- (2) Customer-Focused Results
- (3) Innovative Problem Solving
- (4) Overcoming Extraordinary Challenge
- (5) Effective Contract Administration
- (6) Timely Completion of Project



***Project Overview (5,000 characters or less):***

The objective of the SH-24 & SH-25 City of Rupert project was to replace deficient pavement that existed throughout the city and to install ADA ramps at several intersections. A signal upgrade was added to the scope of the project through a change order to update aging signals at the busiest intersection in Rupert. The intersection at Onieda and 8th Street was modified to reduce the length of vehicles queuing when a train is passing through the crossing. This project fulfilled ITD's strategic objective of providing increased efficiency of goods being transported and enhancing mobility of the traveling public.



***Safety First (1,000 characters or less):***

Idaho Materials and Construction was vigilant by conducting additional potholing to verify that any natural gas lines would not be disturbed. ITD and traffic control worked together to provide a safe course through the project while minimally affecting businesses by maintaining accesses during construction.

***Customer-Focused Results (1,000 characters or less):***

Rutting of the pavement was very evident throughout Rupert since this project was the first pavement rehabilitation in fifty year. The new pavement is smoother which allows for the public and commercial traffic travel through Rupert without being hindered by slow traffic due to rough roads. Idaho Materials and Construction demonstrated great effort in maintaining accesses to private property during the obliteration of the old pavement by constructing ramps throughout Rupert which allowed for vehicles to travel through areas where there was a height difference between curb and the obliterated pavement. Flaggers were utilized to direct and guide traffic when paving didn't permit access to private property or closed intersections.



***Innovative Problem Solving (1,000 characters or less):***

The elevation of the new pavement was difficult to match with the existing manholes. Idaho Materials and construction proposed the use of a Whirlygig and inner tubes to match the elevation of the manholes with the new pavement. The Whirlygig is a level with a trimmer that cuts a plastic collar to the correct height to enable a manhole cover to be placed over the collar and the elevation of the man-hole cover matches the new pavement. IMC utilized inner tubes for manholes that had concrete bells too wide to fit a plastic collar. An inner tube would be inflated over the concrete bell and concrete would be poured around the inner tube to create a collar. The inner tube would be deflated when the concrete has cured and a man-hole cover would be placed onto the new concrete collar. This project required communication and coordination with Eastern Idaho Railroad since the project involved several railroad crossings. ITD and IMC conducted multiple meetings with Eastern Idaho Railroad prior to the start of the project to coordinate the work of replacing the tracks at the crossings with the pavement restoration. These meetings were crucial to preventing the project from conflicting with Eastern Idaho Railroad's track replacement.

***Overcoming Extraordinary Challenge (1,000 characters or less):***

Shallow gas lines existed throughout the city of Rupert. Two gas lines were hit despite Idaho Materials taking all precautions when working near gas lines such as notifying 811 and potholing. Unfortunately the two gas lines that were hit existed shallower in the roadway than at the locations of the potholes. It was discovered that there were several gas lines that could not be located by Intermountain Gas Company. This required Idaho Materials and Construction to conduct additional potholing to verify that their work will not damage the gas lines that could not be located.



***Effective Contract Administration (1,000 characters or less):***

There were several change orders on the project which involved both ITD and Idaho Materials Construction communing and negotiating the extra work for these change orders. The first change order created for this project was to remove a portion of the base material at several locations near curb and gutter, because it was discovered that the existing pavement was thinner than anticipated after cold milling. Thus, the removal of the portion of the base material allowed for the new asphalt to be placed at thicker lifts to match the elevation of the curbs. Another change order was to update the traffic signals at F street which had a history of malfunctioning. The signal update included replacing the cabinet and the electrical components within the cabinet. IMC utilized Electric 1 as a subcontractor for the installation of the new cabinet and components.

***Timely Completion of Project (1,000 characters or less):***

There several innovative construction practices that were utilized on the project such as Whirlygig which expedited the work of adjusting manholes by several days. ITD held weekly partnering meetings with Idaho Materials and Construction to discuss the progress of work and to develop solutions for problems that were encountered during construction.



ITD Applicant or Local Agency Contact Name



Digitally signed by Jesse Barrus  
Date: 2022.11.09 16:55:02 -07'00'

ITD or Local Agency Applicant Signature

Jayson Smith

Digitally signed by Jayson Smith  
Date: 2022.11.10 11:16:05 -07'00'

Contractor Applicant Signature

A valid application package should include a completed and submitted nomination form,  
3-5 photos emailed to [ITDCommunication@itd.idaho.gov](mailto:ITDCommunication@itd.idaho.gov) with contract number and  
project name in the subject line, all received by **November 4, 2022**.

**Please contact [ITDCommunication@itd.idaho.gov](mailto:ITDCommunication@itd.idaho.gov) with application questions**

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The obliteration of the existing asphalt along State Highway 24.



A pug mill was used to blend cement with the existing base to create cement treated base (CTB).





A six inch diameter high pressure gas line that was hit at an intersection in Rupert.



Whirlygig being used to cut a plastic collar for a manhole.





An inner tube that was inflated while manhole cover is resting on top of it.





**ITD/AGC Annual Excellence in Construction Partnering Awards  
- 2022 Nomination Form -**

Contract Number/Route/Milepost: 8621	Construction Engineer: Alan Buehrig
Project Name: SH-44 & SH-55, EAGLE RD INTERSECTION RECONSTRUCTION	Date Project Started: 2/22/21
Contractor Name: Knife River Corporation	Date Project Completed if applicable: <b>N/A</b>
Email: alan.buehrig@itd.idaho.gov	Phone#: 208-334-8352

**1. Did the Contractor/ITD team participate In a Partnership Workshop or informal partnering?**

**YI;II ND**

**2. Category of Award (select one):**

**State Highway Projects (select size):**

- ☐ Projects less than \$1 million
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**3. Application:**

Please provide an overview of the project explaining scope of work, cost, and schedule. Please also provide examples of how the project achieved each of the following six criteria:

- (1) Safety First
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- (3) Innovative Problem Solving
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***Project Overview (5,000 characters or less):***

SH-44, Half CFI Int Eagle Road & SH-44, Eagle was awarded on 10/26/2020 to the Knife River Corporation for \$6,161,467.68. ITD retained CE&I assistance from HMM Engineering on 12/9/20. A preconstruction conference was held on 1/20/21. The 125 working day contract began on 2/22/21 with clearing and grubbing of the shoulders and drainage work for the new intersection.

On 3/15/21 ITD met with KRC and the Engineer of Record, Horrocks, to discuss a proposal to change the intersection design. ITD indicated a change would be coming. KRC notified ITD that they were running out of approved work and would need to demobilize from the project on 7am on 3/18/21 unless further direction was provided to the Contractor. On 3/18/21, during ongoing construction work, ITD notified the KRC a change from a Half Continuous Flow intersection to a widened traditional intersection would be made with additional direction to follow. On 3/20/21 a new digital design was provided to the contractor to be built and to replace the designed intersection. The key design features included adding right lanes to accommodate right turning movements; additional east and southbound left turn lanes and additional east and west bound lane were added on SH-44. Another key design feature was the removal of free running right turns to make pedestrian crossings safer.

ITD and KRC began informal partnering meetings weekly to discuss the design changes. Together the entire team (Horrocks, KRC, HMM Engineering, HDR and ITD) embraced the monumental task of completely changing the intersection design all while limiting delays to contractor work, procuring the additional necessary materials and not increasing the project costs more than 10 percent. ITD and the designer, Horrocks, collaborated on a streamlined delivery schedule that included separate design packages focused on 1.) 3d model; 2.) drainage work; 3.) signal illumination and ITS; 4.) Roadway, Utilities, Wall; and 5.) traffic control and signing. This required a herculean effort by Horrocks to work quickly and efficiently. The project team relied on a strong foundation of trust and communication between all parties especially between ITD and KRC. ITD's consultant, HMM Engineering, lead the way in CE&I which included expedited review of submittals, staying flexible with inspection schedules and processing complex change orders. With the assistance of HOR, ITD reengaged the stakeholders to communicate the changed design and mitigate concerns. Over 75 percent of the contract items were changed through the change order process. The project was substantially completed on 10/20/21. Despite changing the design, the impacts were limited to 43 days and less than \$100k of delay costs.



***Safety First (1,000 characters or less):***

Throughout the duration of the project, the construction team maintained multiple ADA compliant pedestrian detours through the work zone to provide safe access for more vulnerable road users. This included multiple detour setups requiring temporary pedestrian push buttons, new signal timing plans, temporary pavement, pedestrian barriers, temporary truncated domes, and new pavement markings. During the redesign, ITD and Knife River worked together on the pedestrian detour plans to coordinate between multiple construction phases and ensure pedestrians always had safe access through the project.

While completing the redesign, the construction team worked with the City of Eagle and ACHD to add several project features to improve pedestrian safety on the redesigned conventional intersection. These improvements included pedestrian activated light up "Yield to Pedestrians" signs, wider crosswalks and pedestrian ramps, adjusted pedestrian crossing timing, and adjusting stop bar locations for increased pedestrian visibility.

***Customer-Focused Results (1,000 characters or less):***

ITD's mission is the safety, mobility, and economic opportunity of the traveling public, and this project was no exception. From the beginning of this project, ITD has completed an extensive outreach effort to our customers through public meetings, stakeholder workshops, and presentations with the City of Eagle. As opinions changed and the unilateral change from a Half Continuous Flow Intersection to a widened traditional intersection was made early in construction, ITD made extensive efforts to reach out to the customer and inform them of the change. This was done through five different pop-up meetings at various popular public places around the project, meeting with the mayor of the City of Eagle and other representatives and providing opportunities for public and local businesses to comment and ask questions through an online forum as well as using social media and news releases to keep the public informed. A lot of this outreach was accomplished with our own communications team at ITD as well as partnering with HOR. These efforts were made so that ITD can better understand the needs and wants of the public and make every effort to incorporate them into the project.



### ***Innovative Problem Solving (1,000 characters or less):***

- After the decision had been made to redesign the project, the construction team worked together to identify elements of the original design that could be constructed while the waiting for the new design to be completed. Existing elements including shoulder pavement removal, infiltration ditches, and clearing and grubbing were completed prior to the new design being finished, which allowed Knife River to continue working and avoid standby costs.

While the redesign was occurring, the construction team met weekly with the EOR to discuss the redesign plans and provide constructability and scheduling advice about the design. To reduce delays, the initial direction for the redesign was given via CADD files. This allowed the contractor to continue working while the time-consuming process of detailing plan sheets was occurring. In these meetings Knife River helped identify long lead items, including traffic signal components, that would need to be prioritized by the design team to keep the project on schedule.

Due to the long lead time of the new 65 ft signal mast arms, an agreement was reached with ACHD to borrow two of their mast arms while we waited for delivery.

### ***Overcoming Extraordinary Challenge (1,000 characters or less):***

This project quickly went from a design-bid-build to a design-build and we had to think on our feet how we were going to redesign this intersection in such a way that we could keep the contractor working while we came up with new plans. In order to overcome this challenge communication was paramount. We met often with the KRC and their sub-contractors and the design team to look for ways we could keep construction productive by using parts of the existing plans that we determined would not change while the consultant designed the new intersection. Initially the contractor focused on drainage and certain aspects of the north and south legs of the intersection that we determined would stay the same while we broke the new design into smaller packages to be delivered separately. The priority of each package was determined in our weekly meetings and having the contractors input during design, review, and delivery of these packages proved highly valuable. By working together and with the extraordinary hard work of the design team and contractors, we were able to deliver these packages in such a way that the contractor could keep working and deliver the project on schedule.



***Effective Contract Administration (1,000 characters or less):***

The construction team worked together to facilitate a complete project redesign during active construction while minimizing costs and delays to the project. The team negotiated and provided justification for a change to the entire set of bid items as part of multiple AVOs and change orders that replaced the entire plan set and substantial changes the special provisions.

Initial direction for project changes was given via AVOs and followed up with change orders that were grouped by item type. Preference was given to items that needed to be completed earlier or had long lead times, like drainage and traffic signal items. This allowed work to continue while the change orders were being written reducing overall delays to the project.

In total, 55 AVOs and 11 Change Orders were written to justify around \$6 million in total project costs. When the redesigned project work and quantities were substantially similar, original contract bid unit prices were used. All these project changes were completed and agreed upon without a single claim.

***Timely Completion of Project (1,000 characters or less):***

The project was a 125 working day contract. Despite the entire intersection design was changed, the project reached substantial completion before the 2021/2022 winter for only 43 additional working days. This is considered a huge success. During the ongoing redesign KRC and ITD worked together to keep project work continuously flowing with little interruption. Every square foot of the intersection was reconstructed but every day during day time hours all lanes of traffic were reopened to minimize traffic impacts. ITD and KRC worked together through the summer of fall of 2022 to address additional changes to better accommodate pedestrian and bicycle traffic through the intersection.



ITD Applicant or Local Agency Contact Name

Alan Buehrig P.E.

Digitally signed by Alan Buehrig P.E.  
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OU=D3 Residency 4 Design/Construct Engineer, CN=Alan Buehrig P.E.  
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ITD or Local Agency Applicant Signature

Contractor Application

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A valid application package should include a completed and submitted nomination form, 3-5 photos emailed to [ITDCommunication@itd.idaho.gov](mailto:ITDCommunication@itd.idaho.gov) with contract number and project name in the subject line, all received by **November 4, 2022**.

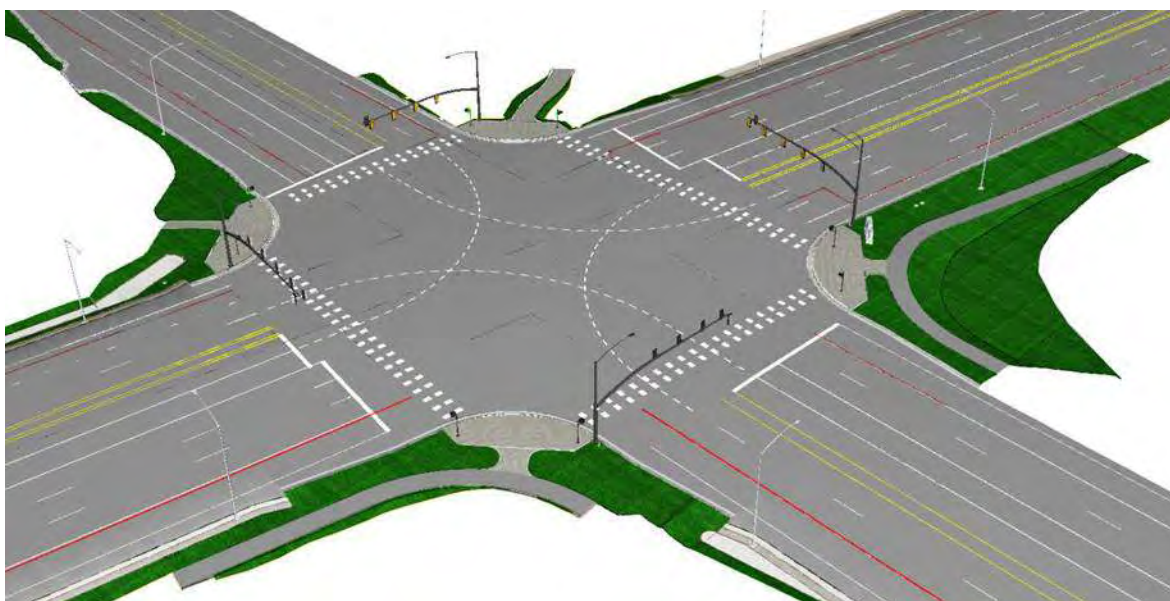
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## EXCELLENCE IN CONSTRUCTION PARTNERING Third Annual Awards



### ITD/AGC Annual Excellence in Construction Partnering Awards - 2022 Nomination Form -

Contract Number/Route/Milepost: A020(226)/SH44/12.20-14.5	Construction Engineer: Sikha Bhusal
Project Name: SH44: SH16 to Linder	Date Project Started: May 3, 2022
Contractor Name: Idaho Materials & Construction (IMC)	Date Project Completed if applicable: August 8, 2022
Email: daris.bruce@itd.idaho.gov	Phone #: 208-334-8331

**1. Did the Contractor/ITD team participate in a Partnership Workshop or informal partnering?**

Y ☐ N ☐

**2. Category of Award (select one):**

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***Project Overview (5,000 characters or less):***

State Highway 44 is a principal commuter route providing service between Gem, Canyon, and Ada counties. The segment being improved was two lane rural highway located between the State Highway 16 and Linder intersections, Ada County. Improvements consists of adding through lanes in each direction and right turn bays at major intersections. In addition to the improvements, the existing paved section was rehabilitated.

The Contract was awarded to Idaho Materials & Construction (IMC). Once initiated the project progressed very well. IMC was very responsive and committed a highly qualified dedicated staff who worked diligently to complete the project. The Department had anticipated that there'd be a need for Saturday work in order to complete the project on time. IMC successfully executed the work such that no Saturday shifts were required. This helped to appease stakeholders who felt that a six day work week was too impact full. IMC also modified activities and locations to mitigate the potential impact to adjacent stakeholders.

The project was completed ahead of time and slightly over budget, but within the targeted 105% of contract. IMC's diligent prosecution of the work and willingness to modify their schedule and activities helped to mitigate construction impacts to stakeholders The Department received numerous positive comments on the quality of the work and the short construction period.



***Safety First (1,000 characters or less):***

Being a principal commuter route, SH44 in the project area is very busy throughout the work week. The Average Daily Traffic (ADT) on the highway at the time of construction was in excess of 22,000 vehicles per day, at peak the two lane highway essentially functioned at near maximum capacity. In consideration of this, and optimizing the allowable work periods for the Contractor, staff developed a construction phasing plan to optimize capacity and safety throughout construction. Though the use of dictated construction phasing, temp widening, concrete barriers, and buffers between the work zone and traffic, the project was developed to allow day time work without any lane closures. This allowed the bulk of the work to take place during day light hours optimizing safety for workers as well as the traveling public. Also once established in the various phases, traffic control remained static for that phase. Maintaining traffic control in a static condition for longer periods of time allowed construction personnel and the traveling public to establish expectations that were consistent throughout that phase. Maintaining traffic control in a static condition eliminated the confusion that comes from frequently changing traffic control during construction.

By proactively managing traffic control and construction the Department eliminated conflict points and separated the work zone from traffic. Phasing allowed the Contractor to focus on and complete areas with little to no interference from the traveling public. The contractor adjusted their schedule to perform traffic impacting activities to off peak times. This combination resulted in a safe and efficient project.

***Customer-Focused Results (1,000 characters or less):***

Through the development and implementation of this project the one of the focus was to avoid and at a minimum mitigate impacts to the traveling public and public in general. The Department initiated a public outreach program during development and continued that through implementation. With proactive phasing, impacts to the traveling public were negligible. When developing the phasing staff also developed a construction schedule where the sole purpose was to reduce the construction schedule to safest and shortest duration possible. This allowed the Department to establish a reasonable, but tight allowable construction duration time frame.

In addition to optimizing traffic control for maximum through put during constriction and constraining contract to as short a duration as reasonable, the department implemented a proactive public outreach campaign. Public outreach started during development of the project and continued to the end of construction.

With the exception of a couple stakeholders who thought that the project would adversely impact them, the general public and stakeholders supported the project were very satisfied with the results. Though public outreach the Department received comments or concerns from stakeholders, working with our Contractor we were successful in making changes to avoid or mitigate impacts to our stakeholder partners.

From initial development through completion minimizing impacts to our customers was a primary focus. The Department and Contractor successfully implemented this project and received positive feedback from our customers.



***Innovative Problem Solving (1,000 characters or less):***

While not being too innovative the District looked for ways to reduce project expense and projects duration. Project the Design staff work with the Materials Engineer to incorporate the existing roadways materials into the new highway section. Using a combination of highway recycling and new highway construction practices a new highway section was developed that balanced using recycled highway materials (existing asphalt pavement and base) with new paving and base. This reduced project expenses and more importantly significantly contract time. The reduction of time paid dividends allowing the project to be completed in a relatively short time. Stakeholders and the traveling public recognized the rapid completion of this project. This would not have been possible without using the hybrid highway recycle and new construction combination.

***Overcoming Extraordinary Challenge (1,000 characters or less):***

Challenges in this corridor were solely related to the high traffic volumes coupled with a significant amount of work. Through project phasing and the use temporary paving we were able to keep a lane open in each direction. Highway capacity during construction was nearly identical to that which existed prior to the start of construction. Through the use of temp paving and phasing almost all of the work was performed during the day which proved to be safer and more efficient.

While the Department made a concerted effort to develop a project which would impact our customers the least, efficient execution of the project was needed to ensure success. IMC committed skilled and efficient personnel to the project and proactively worked to complete the work. This allowed the widening of a primary highway in Ada County to take place with minimal impact to stakeholders and the traveling public.

More telling was the fact that we didn't hear much from stakeholders of the traveling public.



***Effective Contract Administration (1,000 characters or less):***

Staff proactively administered implementation of this project. We anticipate rapid close out of this project, well within the 180 days of completion.

***Timely Completion of Project (1,000 characters or less):***

Early on in development Staff recognized that this project could be constructed in a short period. To that end project phasing and the used or recycled highway material were used to reduce construction durations. Time was adjusted for a couple unforeseen issues; however, this project was completed in short order. The fact that the project progressed rapidly and was completed in a short duration was noted by stakeholders and the traveling public.



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ITD Applicant or Local Agency Contact Name

*Dan's Bruce*

Digitally signed by Daris Bruce  
DN: C=US, E=daris.bruce@itd.idaho.gov, O=Idaho Transportation Department: State of Idaho, OU=District 3: Design Construction  
Group 1, CN=Daris Bruce  
Reason: I am the author of this document  
Date: 2022.10.24 11:00:02 -06'00'

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ITD or Local Agency Applicant Signature

**Peter Wilson**

Digitally signed by Peter Wilson  
Date: 2022.10.27 08:28:37 -06'00'

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Contractor Applicant Signature

A valid application package should include a completed and submitted nomination form,  
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**Clear Form**

**Submit Form**







